

REMARKS

The Office Action dated August 18, 2005, has been received and carefully considered. In this response, claims the 1, 16, 33, 40, 41, 43-45, 49, 61, 77, 80, 83, 86, and 89-93 have been amended, and claims 55, 56, 79, and 85 have been cancelled without prejudice. Entry of the amendments to claims the 1, 16, 33, 40, 41, 43-45, 49, 61, 77, 80, 83, 86, and 89-93, and the cancellation of claims 55, 56, 79, and 85 without prejudice is respectfully requested. Reconsideration of the outstanding objections/rejections in the present application is also respectfully requested based on the following remarks.

At the outset, Applicants note with appreciation the indication on page 32 of the Office Action that claims 54, 55, 66, 67, 79, 80, 85, and 86 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As discussed below, some of these claims have been amended in this manner, and accordingly these claims should now be allowable. Acknowledgment of same is respectfully requested. However, as also discussed below, Applicants have opted to defer rewriting others of the above-identified claims in independent form pending reconsideration of the arguments presented below with respect to the rejected claims.

I. THE INDEFINITENESS REJECTION OF CLAIMS 1 AND 89

On page 3 of the Office Action, claims 1 and 89 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the invention. This rejection is hereby respectfully traversed with amendment.

The Examiner asserts that Applicants have failed to distinctly claim the compare function.

Applicants have amended claims 1 and 89 to address the concerns of the Examiner.

In view of the foregoing, it is respectfully requested that the aforementioned indefiniteness rejection of claims 1 and 89 be withdrawn.

II. THE ANTICIPATION REJECTION OF CLAIMS 49, 77, AND 90

On pages 3-5 of the Office Action, claims 49, 77, and 90 were rejected under 35 U.S.C. § 102(b) as being anticipated by Schneider (U.S. Patent No. 6,201,829). This rejection is hereby respectfully traversed with amendment.

Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. In re Sun, 31 USPQ2d 1451, 1453 (Fed. Cir. 1993) (unpublished).

Anticipation requires that a prior art reference disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. Id. "In addition, the prior art reference must be enabling." Akzo N.V. v. U.S. International Trade Commission, 808 F.2d 1471, 1479, 1 USPQ2d 1241, 1245 (Fed. Cir. 1986), cert. denied, 482 U.S. 909 (1987). That is, the prior art reference must sufficiently describe the claimed invention so as to have placed the public in possession of it. In re Donohue, 766 F.2d 531, 533, 226 USPQ 619, 621 (Fed. Cir. 1985). "Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his own knowledge to make the claimed invention." Id.

Regarding claim 49, the Examiner asserts that Schneider teaches a transmit circuit (Figure 5) comprising a transmit data storage element (Figure 5; Latch 50; Serializer 52; MUX 35) configured to receive data from a transmit data input (Figure 5; bus 34) and sequentially transmit a transmit data output signal when the transmit circuit is operating in a normal mode (column 7, lines 30-57), the transmit data storage element further configured to provide a repeating pattern signal when the transmit circuit is operating in a test mode (column 8, lines 42-46; column 9, lines 17-34), the transmit circuit sequentially

transmitting the transmit data output signal based on the repeating pattern signal when the transmit circuit is operating in the test mode (column 7, lines 48-57).

While Applicants do not necessarily agree with the assertions of the Examiner, in order to forward the present patent application toward allowance, claim 49 has been amended to substantially include the limitations of claim 55, which the Examiner has indicated as being allowable. Accordingly, it is respectfully submitted that claim 49 is now allowable. Acknowledgment of same is respectfully requested.

Regarding claim 77, the Examiner asserts that Schneider teaches a method for operating a transmit circuit to provide for evaluation of a digital signaling system (Figure 5) comprising the steps of: passing transmit data through the transmit circuit when the transmit circuit is operating in a normal mode (column 7, lines 37-48); and generating a transmit repeating pattern in the transmit circuit when the transmit circuit is operating in a test mode (column 9, lines 17-34; column 8, lines 42-46).

While Applicants do not necessarily agree with the assertions of the Examiner, in order to forward the present patent application toward allowance, claim 77 has been amended to substantially include the limitations of claim 79, which the Examiner has indicated as being allowable. Accordingly, it is

respectfully submitted that claim 77 is now allowable.
Acknowledgment of same is respectfully requested.

Regarding claim 90, the Examiner asserts that Schneider teaches a transmit circuit (Figure 5) comprising a transmit data storage element (Figure 5; Latch 50; Serializer 52; MUX 35) configured to receive parallel data from a transmit data input (Figure 5; bus 34) and sequentially transmit a serial transmit data output signal when the transmit circuit is operating in a normal mode (column 7, lines 30-57), the transmit data storage element further configured to provide a repeating pattern signal when the transmit circuit is operating in a test mode (column 8, lines 42-46; column 9, lines 17-34), the transmit circuit sequentially transmitting the serial transmit data output signal based on the repeating pattern signal when the transmit circuit is operating in the test mode (column 7, lines 48-57).

While Applicants do not necessarily agree with the assertions of the Examiner, in order to forward the present patent application toward allowance, claim 90 has been amended to substantially include the limitations of claim 55, which the Examiner has indicated as being allowable. Accordingly, it is respectfully submitted that claim 90 is now allowable. Acknowledgment of same is respectfully requested.

In view of the foregoing, it is respectfully requested that the aforementioned anticipation rejection of claims 49, 77, and 90 be withdrawn.

III. THE ANTICIPATION REJECTION OF CLAIMS 83 AND 87

On pages 3-5 of the Office Action, claims 83 and 87 were rejected under 35 U.S.C. § 102(b) as being anticipated by Chen et al. (U.S. Patent No. 5,726,991). This rejection is hereby respectfully traversed with amendment.

Regarding claim 83, the Examiner asserts that Chen et al. teaches a method for operating a receive circuit (Figure 4) to provide for evaluation of a digital signaling system (Title) comprising the steps of: passing receive data (Figure 4; link 12) through the receive circuit (Figure 4; N-BIT PARALLEL DATA OUTPUTS) when the receive circuit is operating in a normal mode (column 3, lines 65-67; column 4, lines 1-65); and generating a receive repeating pattern in the receive circuit when the receive circuit is operating in a test mode (column 3, lines 65-67; column 4, lines 1-65).

While Applicants do not necessarily agree with the assertions of the Examiner, in order to forward the present patent application toward allowance, claim 83 has been amended to substantially include the limitations of claim 85, which the

Examiner has indicated as being allowable. Accordingly, it is respectfully submitted that claim 83 is now allowable. Acknowledgment of same is respectfully requested.

Claim 87 is dependent upon independent claim 83. Thus, since independent claim 83 should be allowable as discussed above, claim 87 should also be allowable at least by virtue of its dependency on independent claim 83. Moreover, claim 87 recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

Accordingly, it is respectfully requested that the aforementioned anticipation rejection of claims 83 and 87 be withdrawn.

IV. THE OBVIOUSNESS REJECTION OF CLAIMS 1, 3, 4, AND 89

On pages 6-7 of the Office Action, claims 1, 3, 4, and 89 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847). This rejection is hereby respectfully traversed with amendment.

As stated in MPEP § 2143, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references

themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Also, as stated in MPEP § 2143.01, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Further, as stated in MPEP § 2143.01, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re

Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). That is, "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970). Additionally, as stated in MPEP § 2141.02, a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Finally, if an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Regarding claims 1 and 89, the Examiner asserts that Huysmans et al. teaches a method for evaluating a digital signaling system comprising the steps of: generating a transmit repeating pattern in a transmit circuit; transmitting the transmit repeating pattern to a receive circuit; generating a receive repeating pattern in the receive circuit; and comparing the transmit repeating pattern to the receive repeating pattern to obtain a comparison. The Examiner acknowledges that Huysmans et al. fails to teach adjusting a parameter affecting reception of the transmit repeating pattern at the receive circuit. However, the Examiner goes on to assert that Chao et al. teaches

such a feature and thus it would have been obvious to combine the teachings of Huysmans et al. and Chao et al. to arrive at the claimed invention.

However, it is respectfully submitted that Huysmans et al. and Chao et al. fail to teach, or even suggest, a method for evaluating a digital signaling system comprising the steps of: generating a transmit repeating pattern in a transmit circuit; transmitting the transmit repeating pattern to a receive circuit; generating a receive repeating pattern in the receive circuit; comparing the transmitted transmit repeating pattern to the receive repeating pattern in a test mode to obtain a comparison; and adjusting a parameter affecting reception of the transmit repeating pattern at the receive circuit to evaluate how the digital signaling system may operate in a normal mode, as presently claimed. Specifically, in addition to failing to teach adjusting, Huysmans et al. teaches away from the use of separate test and normal modes (e.g., see column 1, lines 65-67; column 2, lines 24-29; column 6, lines 1-4; etc.). Thus, there would have been no motivation to combine Huysmans et al. with Chao et al., which does teach of having separate test and normal modes. In addition, Chao et al. fails to teach anything regarding the generation and/or transmission of repeating patterns, as presently claimed. Indeed, Chao et al. only

teaches the use of a single type of test data, in contrast to both the use of both transmit and receive repeating patterns, as presently claimed. Thus, it is respectfully submitted that Huysmans et al. and Chao et al., either alone or in combination, fail to teach, or even suggest, the claimed invention. Accordingly, it is respectfully submitted that claims 1 and 89 should be allowable.

Claims 3 and 4 are dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claims 3 and 4 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 1, 3, 4, and 89 be withdrawn.

V. THE OBVIOUSNESS REJECTION OF CLAIM 2

On page 7 of the Office Action, claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) and further in view of Whitworth et al. (U.S.

Patent No. 6,331,787). This rejection is hereby respectfully traversed.

Claim 2 is dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claim 2 should also be allowable at least by virtue of its dependency on independent claim 1. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 2 be withdrawn.

VI. THE OBVIOUSNESS REJECTION OF CLAIMS 5, 14-16, 18 AND 19

On pages 7-8 of the Office Action, claims 5, 14-16, 18, and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) and further in view of Foland, Jr. et al. (U.S. Patent No. 5,761,212). This rejection is hereby respectfully traversed.

Claims 5, 14-16, 18, and 19 are dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claims 5, 14-16, 18, and 19 should also be

allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 5, 14-16, 18, and 19 be withdrawn.

VII. THE OBVIOUSNESS REJECTION OF CLAIMS 9, 10, 41, AND 46

On pages 8-9 of the Office Action, claims 9, 10, 41, and 46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) and further in view of Gauthier et al. (U.S. Patent No. 5,228,042). This rejection is hereby respectfully traversed.

Claims 9, 10, 41, and 46 are dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claims 9, 10, 41, and 46 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 9, 10, 41, and 46 be withdrawn.

VIII. THE OBVIOUSNESS REJECTION OF CLAIM 6

On pages 9-10 of the Office Action, claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) and further in view of Sakoda et al. (U.S. Patent No. 6,230,022). This rejection is hereby respectfully traversed.

Claim 6 is dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claim 6 should also be allowable at least by virtue of its dependency on independent claim 1. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 6 be withdrawn.

IX. THE OBVIOUSNESS REJECTION OF CLAIM 7

On page 10 of the Office Action, claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) and further in view of Terry (U.S. Patent No. 6,055,297). This rejection is hereby respectfully traversed.

Claim 7 is dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claim 7 should also be allowable at least by virtue of its dependency on independent claim 1. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 7 be withdrawn.

X. THE OBVIOUSNESS REJECTION OF CLAIM 8

On pages 10-11 of the Office Action, claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) and further in view of Liao et al. (U.S. Patent No. 6,650,698). This rejection is hereby respectfully traversed.

Claim 8 is dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claim 8 should also be allowable at least by virtue of its dependency on independent claim 1. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 8 be withdrawn.

XI. THE OBVIOUSNESS REJECTION OF CLAIMS 11, 31-35, AND 38

On pages 11-12 of the Office Action, claims 11, 31-35, and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) and further in view of Maddux

et al. (U.S. Patent No. 6,421,801). This rejection is hereby respectfully traversed.

Claims 11, 31-35, and 38 are dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claims 11, 31-35, and 38 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 11, 31-35, and 38 be withdrawn.

XII. THE OBVIOUSNESS REJECTION OF CLAIM 12

On page 13 of the Office Action, claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) and further in view of Prentice (U.S. Patent No. 6,674,998). This rejection is hereby respectfully traversed.

Claim 12 is dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claim 12 should also be allowable at least by virtue of

its dependency on independent claim 1. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 12 be withdrawn.

XIII. THE OBVIOUSNESS REJECTION OF CLAIM 13

On page 13 of the Office Action, claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) and further in view of Berkovich (U.S. Patent No. 5,369,755). This rejection is hereby respectfully traversed.

Claim 13 is dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claim 13 should also be allowable at least by virtue of its dependency on independent claim 1. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 13 be withdrawn.

XIV. THE OBVIOUSNESS REJECTION OF CLAIM 17

On page 14 of the Office Action, claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) in view of Foland, Jr. et al. (U.S. Patent No. 5,761,212) and further in view of Couch (U.S. Patent No. 4,475,210). This rejection is hereby respectfully traversed.

Claim 17 is dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claim 17 should also be allowable at least by virtue of its dependency on independent claim 1. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 17 be withdrawn.

XV. THE OBVIOUSNESS REJECTION OF CLAIMS 20-22 AND 24-30

On pages 14-15 of the Office Action, Claims 20-22 and 24-30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) in view of Foland, Jr. et al. (U.S. Patent No. 5,761,212) and further in view of Johnson et al. (U.S. Patent No. 6,606,041). This rejection is hereby respectfully traversed.

Claims 20-22 and 24-30 are dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claims 20-22 and 24-30 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 20-22 and 24-30 be withdrawn.

XVI. THE OBVIOUSNESS REJECTION OF CLAIM 23

On page 15 of the Office Action, claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) in view of Foland, Jr. et al. (U.S. Patent

No. 5,761,212) and further in view of Komatsu et al. (U.S. Patent No. 6,631,486). This rejection is hereby respectfully traversed.

Claim 23 is dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claim 23 should also be allowable at least by virtue of its dependency on independent claim 1. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 23 be withdrawn.

XVII. THE OBVIOUSNESS REJECTION OF CLAIMS 36 AND 37

On pages 15-16 of the Office Action, claims 36 and 37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Maddux et al. (U.S. Patent No. 6,421,801) and further in view of Johnson et al. (U.S. Patent No. 6,606,041). This rejection is hereby respectfully traversed.

Claims 36 and 37 are dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed

above, claims 36 and 37 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 36 and 37 be withdrawn.

XVIII. THE OBVIOUSNESS REJECTION OF CLAIMS 39 AND 40

On page 16 of the Office Action, Claims 39 and 40 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) in view of Foland, Jr. et al. (U.S. Patent No. 5,761,212) and further in view of Sakoda et al. (U.S. Patent No. 6,230,022). This rejection is hereby respectfully traversed.

Claims 39 and 40 are dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claims 39 and 40 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not claimed,

disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 39 and 40 be withdrawn.

XIX. THE OBVIOUSNESS REJECTION OF CLAIMS 42 AND 43

On pages 16-17 of the Office Action, claims 42 and 43 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) and further in view of Johnson et al. (U.S. Patent No. 6,606,041). This rejection is hereby respectfully traversed.

Claims 42 and 43 are dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claims 42 and 43 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 42 and 43 be withdrawn.

XX. THE OBVIOUSNESS REJECTION OF CLAIMS 44, 45, 47, AND 48

On pages 17-18 of the Office Action, claims 44, 45, 47, and 48 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Chao et al. (U.S. Patent No. 6,671,847) and further in view of Jalali et al. (U.S. Patent No. 6,154,659). This rejection is hereby respectfully traversed.

Claims 44, 45, 47, and 48 are dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claims 44, 45, 47, and 48 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 44, 45, 47, and 48 be withdrawn.

XXI. THE OBVIOUSNESS REJECTION OF CLAIMS 49-53 AND 56

On pages 18-19 of the Office Action, claims 49-53 and 56 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of

Gauthier et al. (U.S. Patent No. 5,228,042). This rejection is hereby respectfully traversed.

Regarding claim 49, the Examiner asserts that Huysmans et al. teaches a transmit circuit comprising a transmit data storage element (Figure 2; ATM-TC; MUX; column 4, lines 21-23) configured to receive data from a transmit data input (column 4, lines 14-17) and sequentially transmit a transmit data output signal (column 4, lines 12-23) when the transmit circuit is operating in a normal mode (column 4, lines 46-65), the transmit data storage element further configured to provide a repeating pattern signal (column 5, lines 21-35) when the transmit circuit is operating in a test mode (column 4, lines 24-30), the transmit circuit sequentially transmitting the transmit data output signal based on the repeating pattern signal when the transmit circuit is operating in the test mode, as claimed.

However, first of all, despite the Examiner's attempt to portray Huysmans et al. as teaching a test mode, it is clear that Huysmans et al. fails to provide such a teaching. Indeed, it is respectfully submitted that Huysmans et al. clearly teaches away from the use of a test mode (e.g., see column 1, lines 65-67; column 2, lines 24-29; column 6, lines 1-4; etc.). Thus, there would have been no motivation to either modify Huysmans et al. to provide a test mode, nor would there have

been any motivation to combine Huysmans et al. with any other reference which teaches of having a test mode.

Secondly, the Examiner has conveniently failed to address how Huysmans et al. teaches both a normal mode and a test mode as clearly recited in claim 49. As discussed above, Huysmans et al. clearly teaches away from the use of a test mode (e.g., see column 1, lines 65-67; column 2, lines 24-29; column 6, lines 1-4; etc.). In addition, Huysmans et al. also fails to teach both a normal mode and a test mode. Thus, there would have been no motivation to modify Huysmans et al. to provide a test mode, either alone or in combination with a normal mode.

Third, the Examiner has conveniently failed to address how Huysmans et al. teaches that the transmit circuit sequentially transmits the transmit data output signal based on the repeating pattern signal when the transmit circuit is operating in the test mode, as claimed. As discussed above, Huysmans et al. clearly teaches away from the use of a test mode (e.g., see column 1, lines 65-67; column 2, lines 24-29; column 6, lines 1-4; etc.). Thus, there would have been no motivation to either modify Huysmans et al. to provide a test mode, nor would there have been any motivation to combine Huysmans et al. with any other reference which teaches of having a test mode.

Lastly, the Examiner asserts that Gauthier et al. teaches providing a repeating pattern (FIG. 1, 5) in a test mode (FIG. 1, Control Circuit 30) and transmitting the data out, and thus it would have been obvious to combine the teachings of Huysmans et al. and Gauthier et al. to arrive at the claimed invention. However, as discussed above, Huysmans et al. clearly teaches away from the use of a test mode (e.g., see column 1, lines 65-67; column 2, lines 24-29; column 6, lines 1-4; etc.). Thus, there would have been no motivation to either modify Huysmans et al. to provide a test mode, nor would there have been any motivation to combine Huysmans et al. with any other reference (e.g., Gauthier et al.) which teaches of having a test mode.

Thus, it is respectfully submitted that Huysmans et al. and Gauthier et al., either alone or in combination, fail to teach, or even suggest, the claimed invention. Accordingly, it is respectfully submitted that claim 49 should be allowable.

Claims 50-53 are dependent upon independent claim 49. Thus, since independent claim 49 should be allowable as discussed above, claims 50-53 should also be allowable at least by virtue of their dependency on independent claim 49. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

At this point it should be noted that claim 56 has been cancelled without prejudice in view of the above-described amendments made to claim 49.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 49-53 and 56 be withdrawn.

XXII. THE OBVIOUSNESS REJECTION OF CLAIM 57

On page 20 of the Office Action, claim 57 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Gauthier et al. (U.S. Patent No. 5,228,042) and further in view of applicant's admitted prior art. This rejection is hereby respectfully traversed.

Claim 57 is dependent upon independent claim 49. Thus, since independent claim 49 should be allowable as discussed above, claim 57 should also be allowable at least by virtue of its dependency on independent claim 49. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 57 be withdrawn.

XXIII. THE OBVIOUSNESS REJECTION OF CLAIM 58

On page 20 of the Office Action, claim 58 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Gauthier et al. (U.S. Patent No. 5,228,042) and further in view of Jalali et al. (U.S. Patent No. 6,154,659). This rejection is hereby respectfully traversed.

Claim 58 is dependent upon independent claim 49. Thus, since independent claim 49 should be allowable as discussed above, claim 58 should also be allowable at least by virtue of its dependency on independent claim 49. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 58 be withdrawn.

XXIV. THE OBVIOUSNESS REJECTION OF CLAIM 59

On page 20 of the Office Action, claim 59 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Gauthier et al. (U.S. Patent No. 5,228,042) in view of Jalali et al. (U.S. Patent No. 6,154,659) and further in view of Johnson et al. (U.S. Patent No. 6,606,041). This rejection is hereby respectfully traversed.

Claim 59 is dependent upon independent claim 49. Thus, since independent claim 49 should be allowable as discussed above, claim 59 should also be allowable at least by virtue of its dependency on independent claim 49. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 59 be withdrawn.

XXV. THE OBVIOUSNESS REJECTION OF CLAIM 60

On page 21 of the Office Action, claim 60 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Gauthier et al. (U.S. Patent No. 5,228,042) in view of Jalali et al. (U.S. Patent No.

6,154,659) in view of Johnson et al. (U.S. Patent No. 6,606,041) and further in view of Chen (U.S. Patent No. 6,003,118). This rejection is hereby respectfully traversed.

Claim 60 is dependent upon independent claim 49. Thus, since independent claim 49 should be allowable as discussed above, claim 60 should also be allowable at least by virtue of its dependency on independent claim 49. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 60 be withdrawn.

XXVI. THE OBVIOUSNESS REJECTION OF CLAIMS 61, 91, AND 93

On pages 21-24 of the Office Action, claims 61, 91, and 93 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881). This rejection is hereby respectfully traversed.

Regarding claim 61, the Examiner asserts that Huysmans et al. teaches a receive circuit (Figure 3) comprising: a receive data storage element (Figure 3; ATM-RC; DMUX; PG2) configured to output a receive data output signal (Figure 3; O1') based on a

receive data input signal (Figure 3; IN') received at a receive data input when the receive circuit is operating in a normal mode, the receive data storage element further configured to provide a repeating pattern signal (column 5, lines 57-64) when the receive circuit is operating in a test mode; and a comparison element (Figure 3; CMP) configured to perform a comparison of a relationship between the repeating pattern signal and the receive data input signal received at the receive data input (column 5, lines 57-65) and to produce a comparison output signal (Figure 3; O2') based on the comparison when the receive circuit is operating in the test mode (column 5, lines 65-67), as claimed.

However, despite the Examiner's attempt to portray Huysmans et al. as teaching a test mode, it is clear that Huysmans et al. fails to provide such a teaching. Indeed, it is respectfully submitted, and the Examiner even acknowledges, that Huysmans et al. clearly teaches away from the use of a test mode (e.g., see column 1, lines 65-67; column 2, lines 24-29; column 6, lines 1-4; etc.). Thus, there would have been no motivation to either modify Huysmans et al. to provide a test mode, nor would there have been any motivation to combine Huysmans et al. with any other reference which teaches of having a test mode.

Also, the Examiner has conveniently failed to address how Huysmans et al. teaches both a normal mode and a test mode as clearly recited in claim 61. As discussed above, Huysmans et al. clearly teaches away from the use of a test mode (e.g., see column 1, lines 65-67; column 2, lines 24-29; column 6, lines 1-4; etc.). In addition, Huysmans et al. also fails to teach both a normal mode and a test mode. Thus, there would have been no motivation to modify Huysmans et al. to provide a test mode, either alone or in combination with a normal mode.

At this point it should be noted that claim 61 has been amended solely for purposes of grammatical clarity and correctness.

Accordingly, it is respectfully submitted that Huysmans et al. fails to teach, or even suggest, the claimed invention. Accordingly, it is respectfully submitted that claim 61 is not obvious in view of Huysmans et al..

Regarding claim 91, the Examiner asserts that Huysmans et al. teaches a transmit circuit comprising a transmit data storage element (Figure 2; ATM-TC; MUX; column 4, lines 21-23) configured to receive serial data from a transmit data input (column 4, lines 14-17) and sequentially transmit a serial transmit data output signal (column 4, lines 12-23) when the transmit circuit is operating in a normal mode (column 4, lines

46-65), the transmit data storage element further configured to provide a repeating pattern signal (column 5, lines 21-35) when the transmit circuit is operating in a test mode, the transmit circuit sequentially transmitting the serial transmit data output signal based on the repeating pattern signal when the transmit circuit is operating in the test mode (column 4, lines 24-30), as claimed.

However, despite the Examiner's attempt to portray Huysmans et al. as teaching a test mode, it is clear that Huysmans et al. fails to provide such a teaching. Indeed, it is respectfully submitted, and the Examiner even acknowledges, that Huysmans et al. clearly teaches away from the use of a test mode (e.g., see column 1, lines 65-67; column 2, lines 24-29; column 6, lines 1-4; etc.). Thus, there would have been no motivation to either modify Huysmans et al. to provide a test mode, nor would there have been any motivation to combine Huysmans et al. with any other reference which teaches of having a test mode.

Also, the Examiner has conveniently failed to address how Huysmans et al. teaches both a normal mode and a test mode as clearly recited in claim 91. As discussed above, Huysmans et al. clearly teaches away from the use of a test mode (e.g., see column 1, lines 65-67; column 2, lines 24-29; column 6, lines 1-4; etc.). In addition, Huysmans et al. also fails to teach both

a normal mode and a test mode. Thus, there would have been no motivation to modify Huysmans et al. to provide a test mode, either alone or in combination with a normal mode.

Accordingly, it is respectfully submitted that Huysmans et al. fails to teach, or even suggest, the claimed invention. Accordingly, it is respectfully submitted that claim 91 is not obvious in view of Huysmans et al..

Regarding claim 93, the Examiner asserts that Huysmans et al. teaches a receive circuit (Figure 3) comprising: a receive data storage element (Figure 3; ATM-RC; DMUX; PG2) configured to output a serial receive data output signal based on a serial receive data input signal (Figure 3; IN') received at a receive data input when the receive circuit is operating in a normal mode (column 4, lines 31-65), the receive data storage element further configured to provide a repeating pattern signal (column 5, lines 57-64) when the receive circuit is operating in a test mode; and a comparison element (Figure 3; CMP) configured to perform a comparison of a relationship between the repeating pattern signal and the serial receive data input signal received at the receive data input (column 5, lines 57-65) and to produce a comparison output signal (Figure 3; O2') based on the comparison when the receive circuit is operating in the test mode (column 5, lines 65-67), as claimed.

However, despite the Examiner's attempt to portray Huysmans et al. as teaching a test mode, it is clear that Huysmans et al. fails to provide such a teaching. Indeed, it is respectfully submitted, and the Examiner even acknowledges, that Huysmans et al. clearly teaches away from the use of a test mode (e.g., see column 1, lines 65-67; column 2, lines 24-29; column 6, lines 1-4; etc.). Thus, there would have been no motivation to either modify Huysmans et al. to provide a test mode, nor would there have been any motivation to combine Huysmans et al. with any other reference which teaches of having a test mode.

Also, the Examiner has conveniently failed to address how Huysmans et al. teaches both a normal mode and a test mode as clearly recited in claim 93. As discussed above, Huysmans et al. clearly teaches away from the use of a test mode (e.g., see column 1, lines 65-67; column 2, lines 24-29; column 6, lines 1-4; etc.). In addition, Huysmans et al. also fails to teach both a normal mode and a test mode. Thus, there would have been no motivation to modify Huysmans et al. to provide a test mode, either alone or in combination with a normal mode.

At this point it should be noted that claim 93 has been amended solely for purposes of grammatical clarity and correctness.

Accordingly, it is respectfully submitted that Huysmans et al. fails to teach, or even suggest, the claimed invention. Accordingly, it is respectfully submitted that claim 93 is not obvious in view of Huysmans et al..

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 61, 91, and 93 be withdrawn.

XXVII. THE OBVIOUSNESS REJECTION OF CLAIMS 62-65, 68, AND 70

On pages 24-25 of the Office Action, claims 62-65, 68, and 70 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Gauthier et al. (U.S. Patent No. 5,228,042). This rejection is hereby respectfully traversed.

Claims 62-65, 68, and 70 are dependent upon independent claim 61. Thus, since independent claim 61 should be allowable as discussed above, claims 62-65, 68, and 70 should also be allowable at least by virtue of their dependency on independent claim 61. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 62-65, 68, and 70 be withdrawn.

XXVIII. THE OBVIOUSNESS REJECTION OF CLAIM 69

On pages 25-26 of the Office Action, claim 69 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Johnson et al. (U.S. Patent No. 6,606,041). This rejection is hereby respectfully traversed.

Claim 69 is dependent upon independent claim 61. Thus, since independent claim 61 should be allowable as discussed above, claim 69 should also be allowable at least by virtue of its dependency on independent claim 61. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 69 be withdrawn.

XXIX. THE OBVIOUSNESS REJECTION OF CLAIMS 71-74

On pages 26-27 of the Office Action, claims 71-74 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Gauthier et al. (U.S. Patent No. 5,228,042) and further in view of Maddux et al. (U.S. Patent No. 6,421,801). This rejection is hereby respectfully traversed.

Claims 71-74 are dependent upon independent claim 61. Thus, since independent claim 61 should be allowable as discussed above, claims 71-74 should also be allowable at least by virtue of their dependency on independent claim 61. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 71-74 be withdrawn.

XXX. THE OBVIOUSNESS REJECTION OF CLAIMS 75 AND 76

On page 27 of the Office Action, claims 75 and 76 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huysmans et al. (U.S. Patent No. 6,693,881) in view of Gauthier et al. (U.S. Patent No. 5,228,042) and further in view of Maddux et al. (U.S. Patent No. 6,421,801) and further in view of

Johnson et al. (U.S. Patent No. 6,606,041). This rejection is hereby respectfully traversed.

Claims 75 and 76 are dependent upon independent claim 61. Thus, since independent claim 61 should be allowable as discussed above, claims 75 and 76 should also be allowable at least by virtue of their dependency on independent claim 61. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 75 and 76 be withdrawn.

XXXI. THE OBVIOUSNESS REJECTION OF CLAIMS 78 AND 81

On pages 27-28 of the Office Action, claims 78 and 81 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Schneider (U.S. Patent No. 6,201,829) in view of Gauthier et al. (U.S. Patent No. 5,228,042). This rejection is hereby respectfully traversed.

Claims 78 and 81 are dependent upon independent claim 77. Thus, since independent claim 77 should be allowable as discussed above, claims 78 and 81 should also be allowable at least by virtue of their dependency on independent claim 77.

Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 78 and 81 be withdrawn.

XXXII. THE OBVIOUSNESS REJECTION OF CLAIM 82

On pages 28-29 of the Office Action, claim 82 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Schneider (U.S. Patent No. 6,201,829) in view of Applicant's admitted obviousness of the claim. This rejection is hereby respectfully traversed.

Claim 82 is dependent upon independent claim 77. Thus, since independent claim 77 should be allowable as discussed above, claim 82 should also be allowable at least by virtue of its dependency on independent claim 77. Moreover, claim 82 recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 82 be withdrawn.

XXXIII. THE OBVIOUSNESS REJECTION OF CLAIM 84

On page 29 of the Office Action, claim 84 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen et al. (U.S. Patent No. 5,726,991) in view of Gauthier et al. (U.S. Patent No. 5,228,042). This rejection is hereby respectfully traversed.

Claim 84 is dependent upon independent claim 83. Thus, since independent claim 83 should be allowable as discussed above, claim 84 should also be allowable at least by virtue of its dependency on independent claim 83. Moreover, claim 84 recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 84 be withdrawn.

XXXIV. THE OBVIOUSNESS REJECTION OF CLAIM 88

On page 29 of the Office Action, claim 88 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen et al. (U.S. Patent No. 5,726,991) in view of Applicant's admitted

obviousness of the claim. This rejection is hereby respectfully traversed.

Claim 88 is dependent upon independent claim 83. Thus, since independent claim 83 should be allowable as discussed above, claim 88 should also be allowable at least by virtue of its dependency on independent claim 83. Moreover, claim 88 recites additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 88 be withdrawn.

XXXV. THE OBVIOUSNESS REJECTION OF CLAIM 92

On pages 29-30 of the Office Action, claim 92 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen et al. (U.S. Patent No. 5,726,991). This rejection is hereby respectfully traversed with amendment.

The Examiner asserts that Chen et al. teaches a receive circuit (Figure 4) comprising: a receive data storage element (Figure 4; serial-to-parallel converter 44; latch 52; test pattern checker 54) configured to output a parallel receive data output signal (Figure 4; N-BIT PARALLEL DATA OUTPUTS) based on a

serial receive data input signal received at a receive data input (Figure 4; link 12) when the receive circuit is operating in a normal mode (column 3, lines 65-67; column 4, lines 1-65), the receive data storage element further configured to provide a repeating pattern signal when the receive circuit is operating in a test mode (column 3, lines 65-67; column 4, lines 1-65); and a comparison element (Figure 4; pattern compare logic 62) configured to perform a comparison of a relationship between the repeating pattern signal and the serial receive data input signal received at the receive data input and to produce a comparison output signal based on the comparison when the receive circuit is operating in the test mode (column 5, lines 7-15).

While Applicants do not necessarily agree with the assertions of the Examiner, in order to forward the present patent application toward allowance, claim 92 has been amended to substantially include the limitations of claim 67, which the Examiner has indicated as being allowable. Accordingly, it is respectfully submitted that claim 92 is now allowable. Acknowledgment of same is respectfully requested.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 92 be withdrawn.

XXXVI. THE DOUBLE PATENTING REJECTION OF CLAIMS 1 AND 6-13

On page 31 of the Office Action, claims 1 and 6-13 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9-16 of U.S. Patent No. 6,873,939. This rejection is hereby respectfully traversed.

A terminal disclaimer is submitted herewith to overcome this rejection.

In view of the foregoing, it is respectfully requested that the aforementioned double patenting rejection of claims 1 and 6-13 be withdrawn.

XXXVII. THE DOUBLE PATENTING REJECTION OF CLAIM 89

On page 31 of the Office Action, claim 89 was rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9 and 10 of U.S. Patent No. 6,873,939. This rejection is hereby respectfully traversed.

A terminal disclaimer is submitted herewith to overcome this rejection.

In view of the foregoing, it is respectfully requested that the aforementioned double patenting rejection of claim 89 be withdrawn.

XXXVIII. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

Respectfully submitted,

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